



P2249 PCT-VS
1086-112-0

UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office
ASSISTANT SECRETARY AND COMMISSIONER
OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

DECEMBER 22,, 2000

PTAS

STAAS & HALSEY LLP
ATTN: JAMES D. HALSEY, JR.
700 ELEVENTH STREET, N.W.
SUITE 500
WASHINGTON, D.C. 20001



101499932A

UNITED STATES PATENT AND TRADEMARK OFFICE
NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, CG-4, 1213 JEFFERSON DAVIS HWY, SUITE 320, WASHINGTON, D.C. 20231.

RECORDATION DATE: 10/12/2000

REEL/FRAME: 011183/0048
NUMBER OF PAGES: 2

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:
NARUSE, AKIRA

DOC DATE: 07/09/2000

ASSIGNOR:
KUMON, KOUICHI

DOC DATE: 07/09/2000

ASSIGNOR:
SATO, MITSURU

DOC DATE: 07/09/2000

ASSIGNEE:
FUJITSU LIMITED
1-1, KAMIKODANASKA 4-CHOME,
NAKAHARA-KU
KAWASAKI-SHI, KANAGAWA, JAPAN

211-8588

SERIAL NUMBER: 09646282
PATENT NUMBER:

FILING DATE: 10/12/2000
ISSUE DATE:

RECEIVED

FEB 20 2004

GROUP 3600

011183/0048 PAGE 2

JOANN STEWART, EXAMINER
ASSIGNMENT DIVISION
OFFICE OF PUBLIC RECORDS

U.S. ASSIGNMENT

SAU 7/94

IN CONSIDERATION of the sum of One Dollar (\$1.00), and of other good and valuable consideration paid to the undersigned inventor(s) (hereinafter, "ASSIGNOR") by

(Insert Name(s) & Address(es) of ASSIGNEE(S))

FUJITSU LIMITED

of 1-1, Kamikodanaka 4-chome, Nakahara-ku.

Kawasaki-shi, Kanagawa 211-8588, Japan

(hereinafter, "ASSIGNEE"), the receipt of which is hereby acknowledged, the undersigned ASSIGNOR hereby sells, assigns and transfers to ASSIGNEE the entire and exclusive right, title and interest to the invention entitled

(Title of Invention)

Cache apparatus and control method

relating to International Patent Application PCT/JP88/05588 and/or for which application for Letters Patent of the United States was executed on even date herewith or, if not so executed, was:

(a) executed on _____; (Insert date of execution of application, if not concurrent)

(b) filed on December 10, 1998

Serial No. ____/____

Any registered attorney of STAAS & HALSEY, 700 Eleventh Street, N.W., Washington, D.C. 20001 (202/434-1500) is hereby authorized to insert in (b) the specified data, when known.

and to said application and all Letters Patent(s) of the United States granted on said application and any continuation, division, renewal, substitute, reissue or reexamination application based thereon, for the full term or terms for which the said Letters Patent(s) may be granted and including any extensions thereof (collectively, hereinafter, "said application(s) and Letters Patent(s)").

The ASSIGNOR agree(s), when requested by said ASSIGNEE and without charge to but at the expense of said ASSIGNEE, to do all acts which the ASSIGNEE may deem necessary, desirable or expedient for securing, maintaining and enforcing protection for said invention, including in the preparation and prosecution of said application(s) and the issuance of said Letters Patent(s), in any interference, reissue, reexamination, or public use proceeding, and in any litigation or other legal proceeding which may arise or be declared in relation to same, such acts to include but not be limited to executing all papers, including separate assignments and declarations, taking all rightful oaths, providing sworn testimony, and obtaining and producing evidence.

IN WITNESS WHEREOF, the undersigned inventor(s) has (have) affixed his/her/their signature(s).

(Typed Name & Signature of Inventor(s))

(Date)

(Typed Name & Signature of Witness(es))

1. Akira Naruse Akira Naruse 7/9/00
Akira Naruse

Miki Sato
Miki Sato

1. Kouichi Kumon Kouichi Kumon 7/9/00
Kouichi Kumon

Miki Sato
Miki Sato

1. Mitsuru Sato Mitsuru Sato 7/9/00
Mitsuru Sato

Miki Sato
Miki Sato



P225 287 - US,
1086-1141

UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office
ASSISTANT SECRETARY AND COMMISSIONER
OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

SEPTEMBER 05, 2001

PTAS



101763042A

STAAS & HALSEY LLP
JAMES D. HALSEY, JR.
700 ELEVENTH STREET, N.W.
SUITE 500
WASHINGTON, D.C. 20001

UNITED STATES PATENT AND TRADEMARK OFFICE
NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, CG-4, 1213 JEFFERSON DAVIS HWY, SUITE 320, WASHINGTON, D.C. 20231.

RECORDATION DATE: 06/15/2001

REEL/FRAME: 011922/0498
NUMBER OF PAGES: 2

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:
SATO, MITSURU

DOC DATE: 02/20/2001

ASSIGNOR:
KUMON, KOUICHI

DOC DATE: 02/20/2001

ASSIGNEE:
FUJITSU LIMITED
1-1, KAMIKODANAKA 4-CHOME,
NAKAHARA-KU, KAWASAKI-SHI
KANAGAWA 211-8588, JAPAN

SERIAL NUMBER: 09786049
PATENT NUMBER:

FILING DATE: 06/18/2001
ISSUE DATE:

TONYA LEE, EXAMINER
ASSIGNMENT DIVISION
OFFICE OF PUBLIC RECORDS

06-28-2001

U.S. DEPARTMENT OF COMMERCE

#4

©2001 Staas & Halsey LLP

To the Honorable Commissioner of Patents



101763042

d original documents or copy thereof.

1. Name of conveying party(ies):

Mitsuru SATO
Kouichi KUMONMMD
6.18.01

2. Name and Address of receiving party(ies):

FUJITSU LIMITED
1-1, Kamikodanaka 4-chome
Nakahara-ku, Kawasaki-shi
Kanagawa 211-8588 JAPAN

3. Nature of conveyance:

<input checked="" type="checkbox"/> Assignment	<input type="checkbox"/> Merger
<input type="checkbox"/> Security Agreement	<input type="checkbox"/> Change of Name
<input type="checkbox"/> Other: _____	

Execution Date(s): February 20, 2001

4. Application number(s) or patent number(s):

☐ This document is being filed together with a new application:

(a) The execution date(s) of the application is/are:

(b) The title is:

*** OR ***

☒ This document is being filed after filing of the application:(a) Patent Application No(s). 09/786,049, filed March 1, 2001; or

(b) Patent No(s). , issued .

5. Name and address of party to whom correspondence concerning document should be mailed:

STAAS & HALSEY LLP
Attention: James D. Halsey, Jr.
700 Eleventh Street, N.W., Suite 500
Washington, D.C. 20001
Our Docket: 1086.11416. Total number of applications and patents involved: 1

7. Total fee (37 CFR 3.41)..... (\$ 40.00 per Assignment)

☒ Enclosed
☐ Authorized to be charged to deposit account.
/2001 ATRANI
#581

00000053 09786049

8. Deposit Account No.: 19-3935 (Any underpayment is authorized to be charged to this Deposit

Account) 40.00 00

(Attach duplicate copy of this page if paying by deposit account)

9. Statement and signature.

*To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.*James D. Halsey, Jr., Reg. No. 22,729

Name of Person Signing

Signature

Date

Total number of pages including cover sheet June 13, 2001

DO NOT USE THIS SPACE

U.S. ASSIGNMENT

54X 7/84

IN CONSIDERATION of the sum of One Dollar (\$1.00), and of other good and valuable consideration paid to the undersigned Inventor(s) (hereinafter, "ASSIGNOR") by

(Insert Name(s) & Address(es) of ASSIGNEE(S))

FUJITSU LIMITED

of 1-1, Kamikodanaka 4-chome, Nakahara-ku,

Kawasaki-shi, Kanagawa 211-8588, Japan

(hereinafter, "ASSIGNEE"), the receipt of which is hereby acknowledged, the undersigned ASSIGNOR hereby sells, assigns and transfers to ASSIGNEE the entire and exclusive right, title and interest to the invention entitled

(Title of Invention)

Cache device and control method

relating to International Patent Application PCT/JF98 / 05759 and/or for which application for Letters Patent of the United States was executed on even date herewith or, if not so executed, was:

(a) executed on _____; (Insert date of execution of application, if not concurrent)

(b) filed on December 18, 1998

Serial No. _____

Any registered attorney of STAAS & HALSEY, 700 Eleventh Street, N.W., Washington, D.C. 20001 (202/434-1500) is hereby authorized to insert in (b) the specified date, when known.

and to said application and all Letters Patent(s) of the United States granted on said application and any continuation, division, renewal, substitute, reissue or reexamination application based thereon, for the full term or terms for which the said Letters Patent(s) may be granted and including any extensions thereof (collectively, hereinafter, "said application(s) and Letters Patent(s)").

The ASSIGNOR agree(s), when requested by said ASSIGNEE and without charge to but at the expense of said ASSIGNEE, to do all acts which the ASSIGNEE may deem necessary, desirable or expedient, for securing, maintaining and enforcing protection for said invention, including in the preparation and prosecution of said application(s) and the issuance of said Letters Patent(s), in any interference, reissue, reexamination, or public use proceeding, and in any litigation or other legal proceeding which may arise or be declared in relation to same, such acts to include but not be limited to executing all papers, including separate assignments and declarations, taking all rightful oaths, providing sworn testimony, and obtaining and producing evidence.

IN WITNESS WHEREOF, the undersigned inventor(s) has (have) affixed his/her/their signature(s).

(Typed Name & Signature of Inventor(s))

(Date)

(Typed Name & Signature of Witness(es))

1) Mitsuru Sato	20/2/01	Sumie Nishimura
Mitsuru Sato		Sumie Nishimura
2) Kouichi Kumon	20/2/01	Sumie Nishimura
Kouichi Kumon		Sumie Nishimura
3) _____	_____	_____
4) _____	_____	_____